

杏属一新种及其近缘类群的修订

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A NEW SPECIES OF THE *ARMENIACA* AND REVISION OF THE RELATED TAXA

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Abstract By comparing morphological characteristics of *Armeniaca vulgaris* Lam. and *A. vulgaris* var. *ansu* (Maxim.) Yü et Lu, *A. vulgaris* was found to have great variability and *A. vulgaris* var. *ansu* as identified in some herbaria was found to be a mixed group. Based on these observations, the circumscriptions of *A. vulgaris* and *A. vulgaris* var. *ansu* are revised and a new species, *A. zhidanensis* C. Z. Qiao et Y. P. Zhu, is described.

Key words *Armeniaca vulgaris*; *A. vulgaris* var. *ansu*; *A. zhidanensis*; Revision
摘要 通过对我国北部各省区所产的杏 *Armeniaca vulgaris* Lam. 及野杏 *A. vulgaris* Lam. var. *ansu* (Maxim.) Yü et Lu 的形态学比较研究结果表明, 杏分类群存在较大的变异, 在一些标本馆内被鉴定为野杏的标本实际上包括了一个混杂的类群。本文对杏及野杏的描述作了修订, 分出一个新种志丹杏 *A. zhidanensis* C. Z. Qiao et Y. P. Zhu.

关键词 杏; 野杏; 志丹杏, 形态比较

作者在进行中药材苦杏仁植物资源调查期间, 对河南、河北、陕西、山西、甘肃、新疆、内蒙古、山东等地产的杏及野杏作了实地考察, 参阅了国内各地标本馆所藏的腊叶标本, 发现杏、野杏和志丹杏可以明显地区分如下:

1. 志丹杏 新种 图1

Armeniaca zhidanensis C. Z. Qiao et Y. P. Zhu sp. nov.

A. vulgaris Lam. et *A. vulgaris* var. *ansu* (Maxim.) Yü et Lu affinis, sed ramulis hornotinis pubescentibus; foliis basi rotundatis vel subcordata, supra ad costam et nervos cinereo-pubescentibus, juventute subtus ad nervos pilosis; petiolis ubique cinereo-pubescentibus; fructibus et seminibus minoribus.

Arbor ad 5 — 10 m alta; cortex autro-brunneus, longitudinally ruptilis; ramuli hornotini virides vel lateritii, pubescentes. Folia rotundata vel ovata, 2.5 — 6.5 cm. longa, 2 — 5.5 cm lata, apice acuta vel breviter acuminata, basi rotundata vel subcordata, margine crenata, supra ad costam et nervos cinereo-pubescentia, juventute subtus ad nervos pilosa et in axillis nervorum barbata; petiolis ubique cinereo-pubescentibus, 0.8 — 2.5 cm longis, basi 1 — 3 glandulosis. Flores gemini, 2 — 3 cm diam., pedicellis pubentibus, 2 — 3 mm longis; calyx cupuli-formis, extus basi pilosus, sepalis ovatis vel elongato-ovatis, apice acuta vel obtusis, deflexis post anthesin; petala rotundata vel obverse ovata, alba vel erubescens, unguibus brevibus; stamen c. 50, petalis aliquantum breviora; ovarium piliferum. Fructus sphaeroideus, luteus erubescens pubescens, 1.5 — 2 cm diam. pulposus; putamen compresso-ovoideum, ad 1.4 cm diam., apice obtusum vel leviter acutum, angulo ventrali aliquantum obtusum, dorsali carinato; semen amarum.

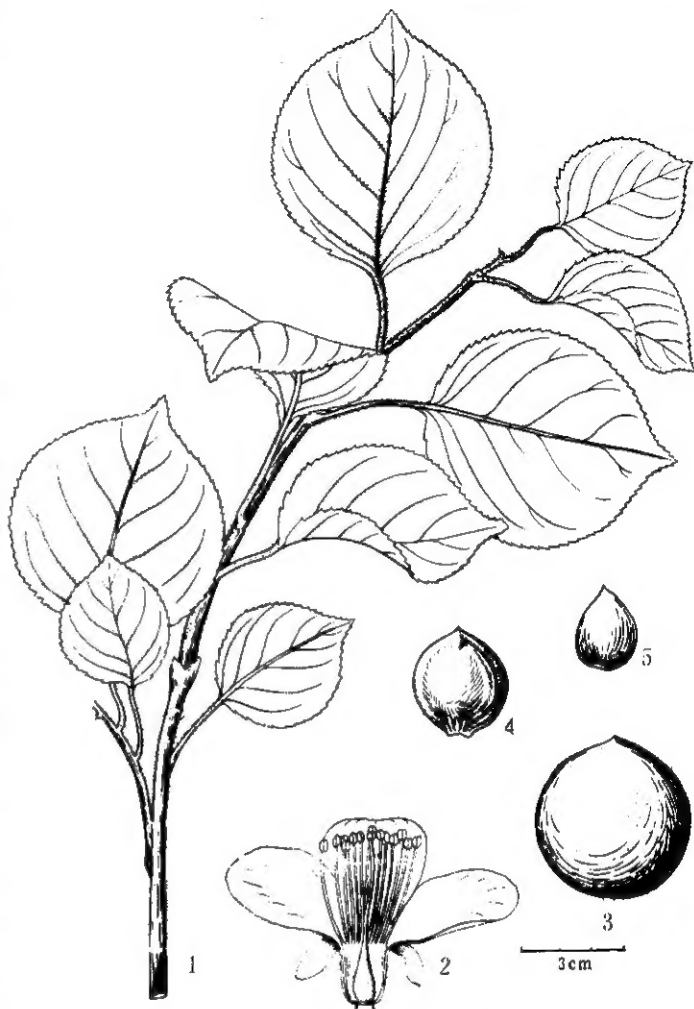


图1 志丹杏 1. 枝; 2. 花; 3. 果实; 4. 核; 5. 种子

Fig. 1 *Armeniaca zhidanensis* 1. branch; 2. flower; 3. drupe; 4. putamen; 5. seed.

Shanxi (山西): Jishan (稷山), Fanjiazhuang (范家庄), S. Ma (马赛) 320148; Zhongyang (中阳), Duanjiazhuang (段家庄), S. Ma (马赛) 320153, Mianshan (绵山), Yunfengsi (云峰寺) 324784. **Ningxia** (宁夏): Helan Shan (贺兰山), Kuozhi (口子), Y. Q. He (何业祺) 388722. **Qinghai** (青海): Xunhua (循化), Mengda (孟达), Z. D. Wei (魏振铎) 308784 (WUG). **Shaanxi** (陕西): Zhidan (志丹), Taiping Shan (太平山), C. Z. Qiao et Y. P. Zhu (乔传卓、朱友平) 88614, 890175, 890176

(Holotype, SMMUS*).

乔木, 高 5—10 m。树皮暗褐色, 纵裂。当年生枝绿色或砖红色, 当年生和一年生枝密生灰白色柔毛。叶圆形或卵形, 长 2.5—6.5 cm, 宽 2—5.5 cm, 顶端急尖或短渐尖, 基部圆形或近心形, 边缘具圆钝锯齿; 上面主脉和侧脉具灰白色短柔毛, 嫩叶下面脉上有稀疏的柔毛, 脉腋处有毛丛; 叶柄遍生灰白色的短柔毛, 长 0.8—2.5 cm, 基部具 1—3 个腺体。花双生, 直径 2—3 cm; 花梗具柔毛, 长 2—3 mm, 花萼杯状, 基部外侧有柔毛, 萼片卵形或卵状长圆形, 先端急尖或圆钝, 花后反折; 花瓣圆形或倒卵形, 白色或带红色, 具短爪; 雄蕊约 50 枚; 子房被短柔毛。果实略呈扁球形, 黄色有红晕, 被短柔毛, 直径 1.5—2 cm, 果实成熟时不开裂; 核卵形, 略扁, 直径达 1.4 cm, 顶端圆钝或稍尖, 基部不对称, 表面平滑, 腹棱稍圆, 背棱龙骨状。

本种与野杏接近, 区别在于当年生或一年生枝条密生短柔毛; 叶基圆形或近心形, 上面脉上密生灰白色短柔毛; 嫩叶的下面脉上有稀疏的柔毛; 叶柄遍生灰白色的短柔毛; 果实及种子甚小。

2. 野杏 (中国植物志)

Armeniaca vulgaris Lam. var. *ansu* (Maxim.) Yü et Lu. 中国植物志 38: 26. 1986. — *Prunus armeniaca* L. var. *ansu* Maxim. in Bull. Acad. Sci. St. Petersburg. 29: 87, 1883; Ito in Tokyo Bot. Mag. 14: 134. 1900; Rehd. in Journ. Arn. Arb. 5: 212. 1840; 陈嵘, 中国树木分类学 465. 1937. — *Prunus ansu* Kom. in Acta Hort. Petrop. 22: 541. 1904; 内蒙古植物志 3: 125. 1977.

Shaanxi (陕西): Taibai Shan (太白山), Liujiakai (刘家崖), Q. S. Zhong (仲世奇) 346778, Chenggu (城固), Erliba (二里坝), P. Y. Li (李培元) 1120, Ganquan (甘泉), Fucun (傅村), K. T. Fu (傅坤俊) 58230, Zhidan (志丹), J. X. Yang (杨金祥) 452586, Yanan (延安), Nanniwan (南泥湾), J. X. Yang (杨金祥) 451830, Suide (绥德), Ershilipu (二十里堡), K. T. Fu (傅坤俊) 58230 (WUG), Zhidan (志丹), C. Z. Qiao et Y. P. Zhu (乔传卓、朱友平) 88609, 88610, 88612, 88613 (SMMUS). **Gansu** (甘肃): Haiyuan (海原), Nanhua Shan (南华山), Huangheerdui (黄河二队) 85784, Qingshui (清水), Shanmen (山门), J. X. Yang (杨金祥) 469598, 469597. **Shanxi** (山西): Heshun (和顺), Chantangsi (蟪堂寺), Huangtudian (黄土队) 447057. **Qinghai** (青海): Jianzha (尖扎), S. W. Liu (刘尚武), 290751 (WUG). Xia Xian (夏县), T. W. Liu (刘天慰) 0851073, Qin Xian (沁县), Guomiaojia (郭苗家), K. C. Kuan et Y. L. Chen (关克俭, 陈艺林) 00239, 68917, Leishan (离山), Anguosi (安国寺), Huangheerdui (黄河二队) 354482 (PE). **Shandong** (山东): Lao Shan (崂山), G. C. Wang (王国川) 218615 (PE).

野杏从 1883 年被 Maximovicz 命名为杏的变种, 到 1904 年 Komarow 将其提升为种, 其主要不同点在于叶片基部楔形或宽楔形; 花常两朵; 核表面粗糙而有网纹。1937

* SMMUS: Second Military Medical University, Shanghai.

年陈嵘在《中国树木分类学》中则记载本变种叶基部为宽楔形和截形。1977年《内蒙古植物志》将本变种特征修改为, 叶基部截形、近心形、稀宽楔形; 叶上面有短柔毛或近无毛, 下面近无毛; 叶柄被短柔毛或近无毛。后两文献对叶的描述与《中国植物志》等不一致, 经检查有关标本与我们的实地采集调查发现有两个原因, 将志丹杏误订为野杏是主要原因, 其次野杏茎、叶也有变异, 当年生枝有毛或无毛, 叶柄光滑或上面有毛。

3. 杏 (中国植物志)

Armeniace vulgaris Lam. Encycl. Meth. Bot. 1: 2. 1783; 俞德浚, 中国植物志 38: 25. 1986. — *Prunus armeniaca* L. var. *typica* Maxim. in Bull. Acad. Sci. St. Petersburg. 29: 86. 1883. Ito in Tokyo Bot. Mag. 14: 134. 1900; Kom. in Fl. URSS. 10: 586. 1941; 陈嵘, 中国树木分类学 465. 1937; 中国高等植物图鉴 2: 307. 1972; 内蒙古植物志 3: 123. 1977.

Shaanxi (陕西): Hua Xian (华县), B. Y. He (恒邦彦) 172613; Taibai (太白), G. X. Su (苏贵兴) 172574, Shiquan (石泉), Xihe (西河), J. Q. Xing (邢吉庆) 382818 (WUG); Hua Xian (华县), Wujiapu (武家堡), C. Z. Qiao et Y. P. Zhu (乔传卓、朱友平) 88607, 88603, 88602, 88601, Zhidan (志丹), C. Z. Qiao et Y. P. Zhu (乔传卓、朱友平) 88616 (SMMUS). **Hebei** (河北): Wuqing (武清), C. Z. Qiao et Y. P. Zhu (乔传卓、朱友平) 88722; Chongli (崇礼), C. Z. Qiao et Y. P. Zhu (乔传卓、朱友平) 88716. **Henan** (河南): Zhengzhou (郑州), Y. P. Zhu (朱友平) 88617. **Beijing** (北京): Huairou (怀柔), Tanghekou (汤河口), Y. P. Zhu (朱友平) 85712, 88713, 88714 (SMMUS). **Gansu** (甘肃): Qinyang (庆阳), Xifeng Shan (西峰山), Huanghedui (黄河队) 70003. **Shanxi** (山西): Hequ (河曲), Quyu (曲峪), Huanghedui (黄河队) 77529 (WUG). Guandi Shan (关帝山), Nanguo (南沟), Huanghedui (黄河队) 523401 (PE). **Xinjiang** (新疆): Korla (库尔勒), Y. W. Tian (田允温) 26772, Huocheng (霍城), Y. Y. Lin (林有润) 1126044 (PE).

杏为久经栽培的果树, 其形态变异颇大。作者经过研究观察发现: 本种一年生枝条和叶柄的毛茸变化较大, 如陕西华县栽培的大结杏及小毛杏等, 当年生枝具毛, 叶柄的上面亦具柔毛。对此, 有关杏的文献记载是不够全面的。